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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 09/604,002  | 06/26/2000  | Yuzuru Fukuda        | 046601-5052         | 2629             |
| 9629  | 7590        | 01/03/2006           | EXAMINER            |                  |
| MORGAN LEWIS & BOCKIUS LLP<br>1111 PENNSYLVANIA AVENUE NW<br>WASHINGTON, DC 20004 |             |                      | TRAN, LY T          |                  |
|   |             |                      | ART UNIT            | PAPER NUMBER     |
|   |             |                      | 2853                |                  |

DATE MAILED: 01/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

AK

**Office Action Summary**

Application No.

09/604,002

Applicant(s)

FUKUDA, YUZURU

Examiner

Ly T. TRAN

Art Unit

2853

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
 Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 October 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 4 and 5 is/are rejected.
- 7) ☒ Claim(s) 3 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 6/7/05 has been entered.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ohshima (USPN 6,348,519).

With respect to claim 1, Ohshima et al discloses a recording for ink printer comprising:

- Colorants (Column 3: line 51)
- Water (Column 3: line 64)

- Fine particles of at least one photo-curable resin (Column 5: line 55-56) and at least two non-photo-curable resins (Column 4: line 66-67 shows one non-photo-curable resin and Column 6: line 37-41 shows another non-photo-curable resin)
- Wherein at least one of the non-photo-curable resins is a self cross linking resin (Column 4: line 66-67);
- The content of the photo-curable resin relative to the total weight of the non-photo-curable resin and the photo-curable-resin is from about 10 to about 80% (Column 5: line 56-60). (Note: A= photo-curable resin=30, B=non-photo-curable resin=40, the content of A relative to the total weight of A+B is  $[B/(A+B)] * 100\% = [40/(30+40)] * 100\% = 57\%$  which is between the range of 10 to 80%)

Ohshima discloses the claimed invention except for the total solids content of the resin particles ranges between 20-80%. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the total solids content of the resin particles ranges between 20-80%, since it has been held that the general condition of a claim are discloses in the prior art, discovering the optimum range involves only routine skill in the art.

3. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ohshima et al (USPN 6,348,519) in view of Mathias (USPN 5,513,569).

Ohshima discloses the claimed invention except that using screen printing instead of inkjet printing. Mathias shows that screen printing and inkjet printing is an equivalent structure known in the art (Column 6: line 58-67). Therefore, because screen printing and inkjet printing were art recognized equivalents at the time the invention was made, one of ordinary skill in the art would have found it obvious to substitute inkjet printing for screen printing for the same purpose as printing an image.

4. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ohshima et al (USPN 6,348,519) in view of Mikami et al (USPN 5,962,552).

Ohshima fails to teach at least one non-photo curable resin is acrylic silicone.

Mikami teaches the ink containing acrylic silicone resin (abstract)

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the acrylic silicone resin as taught by Mikami. The motivation of doing so is to prevent blotting and obtain high image density.

5. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ohshima et al (USPN 6,348,519) in view of Kubota et al (USPN 6,086,197).

Ohshima fails to teach the non-photo curable resin is a fluororesin.

Kubota teaches the ink containing fluororesin (Column 8: line 56).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have fluororesin as taught by Kubota. The motivation of doing so is to obtain a high water resistance and rubbing resistance.

***Response to Arguments***

6. Applicant's arguments filed 10/20/05 have been fully considered but they are not persuasive.

Applicant's argument that Ohshima discloses the relative to the total weight of the ink, this measurement is very different from Applicant's measurement of the amount of the photo-curable resin relative to the total weight of the non-photo curable resin and the photo-curable resin. This argument is not deemed to be persuasive because the content of the photo-curable resin relative to the total weight of the non-photo-curable resin and the photo-curable-resin is from about 10 to about 80% (Column 5: line 56-60). (Note: A= photo-curable resin=30, B=non-photo-curable resin=40, the content of A relative to the total weight of A+B is  $[B/(A+B)] * 100\% = [40/(30+40)] * 100\% = 57\%$  which is between the range of 10 to 80%).

***Allowable Subject Matter***

7. Claim 3 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 3 is allowable over prior art of record because at least prior art have not been discloses or teach the fie particle have at least three non-photo curable containing resin.

***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ly T. TRAN whose telephone number is 571-272-2155. The examiner can normally be reached on M-F (7:30am-5pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Meier can be reached on 571-272-2149. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LT

December 28, 2005



Stephen D. Meler  
Primary Examiner